

REMARKS

Specification Amendments

The specification, first paragraph, has been amended to correctly reflect the claim of priority as set out in the originally filed “Combined Declaration / Power of Attorney” form and in the originally filed “Utility Patent Application Transmittal” form, copies of which are attached hereto. Applicants respectfully request entry of these amendments.

Applicants respectfully request that all pertinent U.S. Patent and Trademark Office records relating to the subject application be changed to reflect this correction.

Claim Amendments

This is intended as a full and complete response to the Office Action dated July 27, 2010, having a shortened statutory period for response set to expire on October 27, 2010. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-45 are pending in the application and remain pending following entry of this response.

Claim Rejections – 35 USC 103

Claims 1-4, 8-12, 24, 25, 27-31 and 33-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kari ((US 6,597,682 B1) in view of Wilson et al (US 2004/0176097) A1).

Applicant respectfully traverses this rejection.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2141. Establishing a *prima facie* case of obviousness begins with first resolving the factual inquiries of *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The factual inquiries are as follows:

- (A) determining the scope and content of the prior art;
- (B) ascertaining the differences between the claimed invention and the prior art;

- (C) resolving the level of ordinary skill in the art; and
- (D) considering any objective indicia of nonobviousness.

Once the *Graham* factual inquiries are resolved, the Examiner must determine whether the claimed invention would have been obvious to one of ordinary skill in the art.

Respectfully, Applicants submit that the Examiner has not properly characterized the teachings of the references and/or the claims at issue. Accordingly, a *prima facie* case of obviousness has not been established.

As an example, Applicants respectfully submit that, despite the Examiner's contention, *Kari* fails to teach "partitioning, at an access point, a control channel used for transmitting control information into a plurality of subchannels" and "selecting, *for each of at least two user terminals*, one of the subchannels to be used for transmitting control information from the access point to the respective user terminal, based on one or more selection criteria" as recited in claim 1.

The Examiner refers to column 3, lines 1-20 and column 3, line 53 to column 4, line 14 as teaching these features. These sections are listed herein for convenience:

The object of the invention is to develop a method for reserving a data transmission channel or its sub-channel in a telecommunication network using radio resource allocation in such a manner that the problems mentioned above can be solved. The objects of the invention are achieved with the method which is characterized by what is stated in claim 1. The dependent claims relate to the preferred embodiments of the invention.

The invention is based on that: different priorities are assigned to the data packets to be sent; different priorities are also assigned to possible control sub-channels and the telecommunication controller sends to the terminal equipments information about the priorities assigned to control sub-channels; on the basis of the priority of the data packet to be sent and the priority of the control sub-channels, each terminal equipment determines the moments when said terminal equipment is allowed to send a channel request.

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According to one embodiment of the invention, a telecommunication controller, such as a base station BTS sends an exact priority definition. This is illustrated in FIG. 2A. In the solution shown in FIG.

2A, the BTS sends in the downlink direction on the control channel information about the priority of each uplink control sub-channel. For example, in the case of four priority levels, every other (8 time slots) of 16 successive time slots can be allocated to a higher priority (P4). Every other (4 time slots) of the remaining time slots is allocated to the second highest priority (P3). In the case of four priority levels, for example, 15 of 16 time slots would be used with this method. Every 16th time slot ("XX" in FIG. 2A) can be assigned to the priority whose average delay in relation to the nominal or maximum delay of this priority is the worst. Alternatively, every 16th time slot can be assigned to a completely different purpose or the sequence of priorities can be repeated after 15 time slots. By spreading the time slots possibly used for allocation--for example so that every other possible time slot is allocated to the highest priority--as little delay as possible is caused for sending of a channel request.

As an alternative to the base station BTS sending the priority explicitly, it can send specific parameters, such as proportions N1 to N4 of the control sub-channels allocated to different priority classes. This is illustrated in FIG. 2B. In this case at the beginning of a certain repeating period of study, a time period corresponding to its proportion is first allocated to a higher priority and after that to the second highest priority, and so on.

These paragraphs certainly do not teach partitioning a control channel into multiple subchannels and selecting different ones of the subchannels for transmitting control information to respective different user terminals, as recited in claim 1. In contrast, there is only description that a base station sends "in the downlink direction on the control channel" (a single control channel) "control channel information about the priority of each uplink control sub-channel." There is absolutely no teaching *different subchannels are selected for transmitting control information to respective user terminals*, as recited in claim 1.

The Examiner acknowledges that *Kari* fails to teach operating partitioned subchannels at different data rates, but relies on *Wilson* as disclosing this feature. However, as noted above the Examiner has failed to properly construe the teachings of *Kari*. Accordingly, Applicants submit that, even if combined, *Kari* and *Wilson* fail to teach each and every element recited in claim 1. Claims 9, 20, 25, 30, 34, 37, 40 and 43 recite similar elements as claim 1 that are not taught in *Kari* and *Wilson*.

Accordingly, Applicants submit these claims, as well as their dependents are allowable and respectfully request withdrawal of this rejection.

Claims 5-7, 22, 23, 26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kari* (US 6,597,682 B1) in view of *Wilson et al* (US 2004/0176097 A1) and further in view of *Kadous* (US 2003/0165189 A1).

These claims each depend from claims 1, 20, 25 and 30 which Applicants submit are allowable for at least reasons discussed above. Further, Applicants submit that *Kadous* fails to overcome the deficiencies in the teachings of *Kari* in view of *Wilson* discussed above.

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Amendment dated October 6, 20120
Reply to Office Action of July 6, 2010

CONCLUSION

Having addressed all issues set out in the Office Action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Please charge any fees or credit any overpayments that may be due with this response to Deposit Account No. 17-0026.

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Respectfully submitted,

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